

**IN THE CLAIMS**

Please amend claims 1-16 as follows:

1. (currently amended) A disposable reactor ~~(100)~~ for culturing cells or microorganisms or for dissolving or suspending a powder in a liquid medium, ~~which comprises~~ing an outer envelope, ~~(101)~~ and at least one inner envelope, ~~(102)~~ ~~which are both~~ made of plastic, these envelopes being placed in one another ~~so as to~~ define, on the one hand, inside said inner envelope, an inner compartment and, on the other hand, between the inner and outer envelopes, at least one outer compartment, the compartments being intended to contain a liquid medium, said envelopes being closed in a sealed manner with respect to the external environment and communicating with one another, ~~which~~ wherein the reactor is provided with means for injecting a pressurized gas into said inner compartment and means for removing directly said pressurized gas from said outer compartment outside the reactor in order to stir the liquid medium by making it flow between said compartments mainly in the bottom of said compartments.

2. (currently amended) The reactor ~~(100)~~ as claimed in claim 1, ~~characterized in that~~ wherein each inner envelope has an opening ~~(104)~~ in its bottom and at least two lateral openings ~~(105)~~ capable of establishing communication between the inner and outer compartments, the opening provided in the bottom of said inner envelope having a much greater cross section than that of said lateral openings.

3. (currently amended) The reactor ~~(100)~~ as claimed in either of claims 1 and or 2, ~~characterized in that it~~ wherein ~~includes means for injecting a said~~ pressurized gas such as pure oxygen or else nitrogen ~~into the inner compartment.~~

4. (currently amended) The reactor ~~(100)~~ as claimed in claim 3, ~~characterized in that~~ wherein each inner envelope has a band of perforations ~~(106)~~ extending approximately transversely to the longitudinal direction of said envelope, said perforations favoring transfer of the gas from one compartment to the other.

5. (currently amended) The reactor ~~(100)~~ as claimed in ~~either of claims 3 and 4,~~ ~~characterized in that~~ wherein said gas injection means comprise a plastic nozzle connected in a sealed manner to said inner envelope so that one of its ends emerges in the inner compartment and, the other end emerges outside said reactor.

6. (currently amended) The reactor ~~(100)~~ as claimed in ~~one of claims 1 to 5,~~ ~~characterized in that~~ wherein said gas injection and discharge means comprise plastic nozzles ~~(103, 103')~~ connected in a sealed manner to said inner and outer envelopes, respectively, so that one of their ends emerges in one of said inner and outer compartments and, the other end emerges outside said reactor.

7. (currently amended) The reactor ~~(100)~~ as claimed in claim 6, ~~characterized in that~~ wherein the injection of pressurized gas and of pure oxygen into said inner compartment takes place via the same nozzle ~~(103)~~.

8. (currently amended) The reactor ~~(100)~~ as claimed in ~~one of the preceding claims~~ claim 1, ~~characterized in that it~~ wherein the reactor includes at least one plastic pipe ~~(108)~~ which is connected in a sealed manner to said outer envelope, said at least one plastic pipe and emerges at from one end in the bottom

of the outer compartment and at the other end outside the reactor, ~~in order to~~ introduce a measurement probe.

9. (currently amended) The reactor ~~(100)~~ as claimed in ~~one of the preceding claims~~claim 1, ~~characterized in that~~wherein it the reactor includes at least one vortex tube ~~which is connected in a sealed manner to said outer envelope and emerges at~~from one end in the bottom of the outer compartment and at the other end outside the reactor, ~~in order to~~ regulate the temperature of the liquid medium.

10. (currently amended) The reactor ~~(100)~~ as claimed in ~~one of the claims 5 to 9~~, ~~characterized in that~~wherein each gas inlet and outlet is provided with an absolute filter.

11. (currently amended) The reactor ~~(100)~~ as claimed in ~~one of the preceding claims~~, ~~characterized in that~~claim 1, wherein said outer envelope has, laterally, a tap-off ~~(107)~~ for introducing the culture medium into said compartments.

12. (currently amended) The reactor ~~(100)~~ as claimed in ~~one of the preceding claims~~, ~~characterized in that~~claim 1, wherein said outer and inner envelopes are made of a flexible material.

13. (currently amended) The reactor ~~(100)~~ as claimed in claim 12, ~~characterized in that~~wherein said envelopes are made of a flexible polyvinyl chloride film.

14. (currently amended) The reactor ~~(100)~~ as claimed in claim 12, ~~characterized in that~~wherein said envelopes are made of a polyurethane film.

15. (currently amended) The reactor ~~(100)~~ as claimed in ~~one of the preceding claims, characterized in that~~claim 1, -it- wherein the reactor includes a sampling bag made of a flexible plastic material and connected in a sealed manner to said outer envelope so that it communicates with the outer compartment, ~~in order that, whereby, when with the liquid medium being is~~ stirred, part of the latter is poured out into said sampling bag.

16. (currently amended) The reactor ~~(100)~~ as claimed in ~~one of claims 12 to 15, characterized in that~~wherein the inner and outer envelopes ~~(102, 101)~~ are suspended in a rigid retaining tank.